Shake and Rake

When the earth's surface shakes or trembles—causing buildings to sway or pavement to crack— it's known as an earthquake. Geologists believe most earthquakes occur when the edges of huge plates that cover much of the earth move past each other, sending shock waves through the ground. California, which lies along the boundary of two great plates (the Pacific and North American), is prime earthquake country.

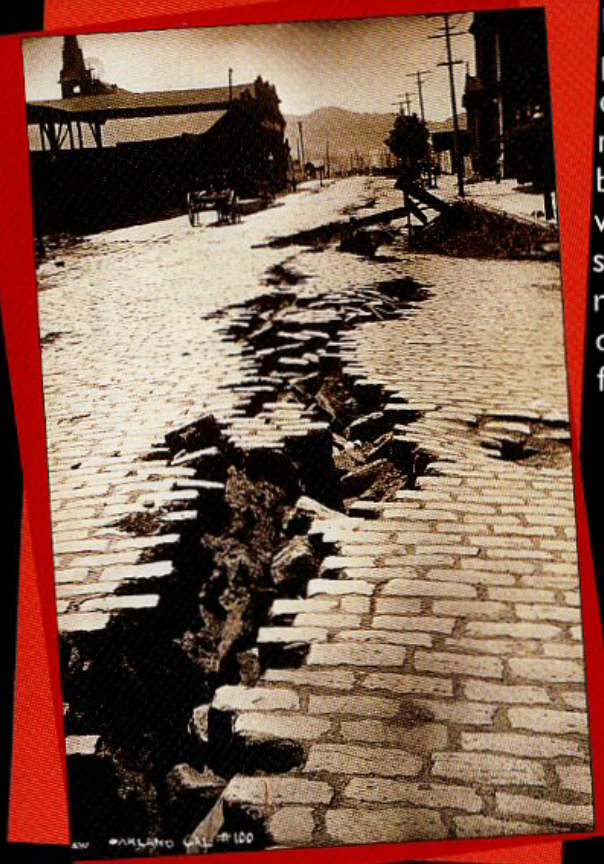
Earthquakes are measured on a scale of up to 10 points. The 1989 San Francisco earthquake was a 7.1, while the quake that struck Los Angeles in 1994 was a 6.8—both very big. But the 1906 San Francisco earthquake—an 8. 3—was a real dish rattler. Most of the city had to be rebuilt after that one.

Sometimes, following a big quake, smaller quakes called aftershocks can rattle an area for months afterwards. Many earthquakes, though, are so small that people never notice them.

Scientists use instruments called seismographs to track earthquakes, which often erupt along lines or fractures called faults. Sometimes, quakes start in faults miles from where the worst damage occurs. That's because a quake's force travels through the ground and shakes the surface along its route.

The biggest and most famous fault is the San Andreas, which runs for about 650 miles along the California coast.

No one knows yet how to predict or prevent earthquakes, but many buildings, bridges, and highways have been strengthened or rebuilt to lessen damage from future quakes.



A photo taken in San Francisco on April 18, 1906, highlights the power of an earthquake.

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